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EXAMINER	
DUNCAN, MARC M	

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/074,204	WU ET AL.	
	Examiner	Art Unit	
	Marc M Duncan	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5,7-11,14 and 16-20* is/are rejected.

7)☒ Claim(s) *3,4,6,12,13 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 April 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

Claims 1, 2, 5, 7, 8, 9, 10, 11, 14, 16, 17, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckland et al. in view of ACPI.

Claims 3, 4, 6, 12, 13 and 15 are objected to.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 5, 7, 8, 9, 10, 11, 14, 16, 17, 18, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buckland et al. in view of ACPI.

Regarding claim 1:

Buckland teaches a communications medium connecting a plurality of electronic devices in Fig. 6.

Buckland teaches a detector coupled to the communications medium, the detector receiving error signals transmitted by the communications medium, one or more error signals associated with one of the electronic devices in Fig. 6 and col. 12 lines 1-4.

Buckland teaches the error signal being a parity or system error signal in col. 12 line 1-2.

Buckland teaches blocking communications with a device in response to the error signal in col. 12 lines 5-7.

Buckland does not explicitly teach an operating system, including device drivers, capable of configuring communications between one or more applications and the bus. Buckland does not explicitly teach a BIOS capable of determining an electronic device associated with a first signal and the BIOS generating a hot-eject signal identifying that electronic device in response to the first signal. Buckland does not explicitly teach wherein the operating system blocks communications between the applications and the identified electronic device in response to the BIOS generating the hot-eject signal Buckland does, however, teach an operating system. Buckland also teaches blocking communications to an identified electronic device.

ACPI teaches an operating system, including device drivers, capable of configuring communications between one or more applications and the communications medium in Figure 1-1 and section 1 lines 3-4. ACPI teaches OS directed configuration and clearly teaches device drivers.

ACPI teaches a BIOS, the BIOS capable of determining an electronic device associated with a first signal and the BIOS generating a hot-eject signal identifying that electronic device in response to the first signal in Fig. 1-1 and section 6.3. ACPI teaches the generation of the hot-eject signal. In the ACPI system, such a signal would be sent through the BIOS.

ACPI teaches wherein the operating system blocks communications between the applications and the identified electronic device in response to the BIOS generating the hot-eject signal in section 6.3. The OS shuts down and unloads the device for which it has received a hot-eject signal.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the use of a hot-eject signal to block communications with a device as taught by ACPI with Buckland's teaching that a device should be isolated in response to an error signal.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because Buckland explicitly states the need to isolate and remove a device that produces a first error signal without shutting down power to the entire system. ACPI meets that explicitly stated need.

Regarding claim 2:

Buckland teaches wherein the first error signal is a PCI parity error (PERR#) or a PCI system error (SERR#) in col. 12 line 1.

Regarding claim 5:

Buckland teaches wherein the identified electronic device is an expansion card and further comprising an expansion connector coupled to the communications medium and the expansion card, wherein the expansion connector ceases communications with the communications medium after the first error signal is transmitted as a result of the first error signal in col. 2 lines 19-22.

Regarding claim 7:

Buckland teaches wherein the communications medium is a PCI local bus in Fig. 6.

Regarding claim 8:

Buckland teaches wherein the identified electronic device is an on board device and the on board device is programmed to cease communications with the communications medium after the first error signal is transmitted as a result of the first error signal in Fig. 6 and col. 2 lines 19-22. It can be seen from Fig. 6 that the device is an on board device.

Regarding claim 9:

ACPI teaches wherein the hot-eject signal is a system control interrupt in Fig. 4-3.

Regarding claim 10:

Buckland teaches detecting a first error signal on a communications medium, the communications medium connecting a plurality of electronic devices in col. 12 lines 1-4.

Buckland teaches determining an electronic device associated with the first error signal in col. 2 lines 14-16.

Buckland teaches blocking communications between at least one application and the identified electronic device in col. 2 lines 16-19.

Buckland does not explicitly teach generating a hot-eject signal that identifies the electronic device associated with the first error signal. Buckland does not explicitly teach blocking communications with an operating system that includes device drivers in response to receiving the hot-eject signal. Buckland does, however, teach blocking communications with a device that produces an error signal. Buckland also teaches removing a device that produces an error signal without shutting down system power.

ACPI teaches generating a hot-eject signal that identifies the electronic device associated with the first error signal in section 6.3. ACPI teaches blocking communications with an operating system that includes device drivers in response to receiving the hot-eject signal in section 6.3.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the hot eject signal of ACPI with the isolation teachings of Buckland.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because Buckland explicitly states the need to isolate and remove a device that produces a first error signal without shutting down power to the entire system. ACPI meets that explicitly stated need.

Regarding claim 11:

Buckland teaches wherein the first error signal is a PCI parity error (PERR#) or a PCI system error (SERR#) in col. 12 line 1.

Regarding claim 14:

Buckland teaches wherein the identified electronic device is an expansion card and further comprising an expansion connector coupled to the communications medium and the expansion card, wherein the expansion connector ceases communications with the communications medium after the first error signal is transmitted as a result of the first error signal in col. 2 lines 19-22.

Regarding claim 16:

Buckland teaches wherein the communications medium is a PCI local bus in Fig. 6.

Regarding claim 17:

Buckland teaches wherein the identified electronic device is an on board device and the on board device is programmed to cease communications with the communications medium after the first error signal is transmitted as a result of the first error signal in Fig. 6 and col. 2 lines 19-22. It can be seen from Fig. 6 that the device is an on board device.

Regarding claim 18:

ACPI teaches wherein the hot-eject signal is a system control interrupt in Fig. 4-3.

Regarding claim 19:

Buckland teaches a bus connecting a plurality of electronic devices in Fig. 6.

Buckland teaches a detector coupled to the bus, the detector receiving error signals transmitted by the bus, one or more error signals associated with one of the electronic devices in Fig. 6 and col. 12 lines 1-4.

Buckland teaches the error signal being a parity or system error signal in col. 12 line 1-2.

Buckland teaches blocking communications with a device in response to the error signal in col. 12 lines 5-7.

Buckland does not explicitly teach an operating system, including device drivers, capable of configuring communications between one or more applications and the bus. Buckland does not explicitly teach a BIOS capable of determining an electronic device associated with a first signal and the BIOS generating a hot-eject signal identifying that electronic device in response to the first signal. Buckland does not, explicitly teach wherein the operating system blocks communications between the applications and the identified electronic device in response to the BIOS generating the hot-eject signal Buckland does, however, teach an operating system. Buckland also teaches blocking communications to an identified electronic device.

ACPI teaches an operating system, including device drivers, capable of configuring communications between one or more applications and the bus in Figure 1-1 and section 1 lines 3-4. ACPI teaches OS directed configuration and clearly teaches device drivers.

ACPI teaches a BIOS, the BIOS capable of determining an electronic device associated with a first signal and the BIOS generating a hot-eject signal identifying that

electronic device in response to the first signal in Fig. 1-1 and section 6.3. ACPI teaches the generation of the hot-eject signal. In the ACPI system, such a signal would be sent through the BIOS.

ACPI teaches wherein the operating system blocks communications between the applications and the identified electronic device in response to the BIOS generating the hot-eject signal in section 6.3. The OS shuts down and unloads the device for which it has received a hot-eject signal.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the use of a hot-eject signal to block communications with a device as taught by ACPI with Buckland's teaching that a device should be isolated in response to an error signal.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because Buckland explicitly states the need to isolate and remove a device that produces a first error signal without shutting down power to the entire system. ACPI meets that explicitly stated need.

Regarding claim 20:

ACPI teaches wherein the operating system continues operating normally after receiving the hot-eject signal system control interrupt and blocking communications between the applications and the identified electronic device in section 6.3. The OS does not change operation of the system after receiving the hot-eject signal and processing it.

Allowable Subject Matter

Claims 3, 4, 6, 12, 13 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art was not found that explicitly teaches or fairly suggests wherein the BIOS creates a log entry in response to receiving the first error signal as outlined in claims 3 and 12. Prior art was not found that explicitly teaches or fairly suggests wherein the BIOS does not generate a hot-eject signal in response to a second error signal as outlined in claims 4 and 13. Prior art was not found that explicitly teaches or fairly suggests wherein embedded server management causes the expansion connector to cease communications with the communications medium in response to the first error signal as outlined in claim 6. Prior art was not found that explicitly teaches or fairly suggests wherein the step of disabling is performed by embedded server management as outlined in claim 15.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not relied upon contains elements of the instant claims and/or represents a current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc M Duncan whose telephone number is 703-305-4622. The examiner can normally be reached on M-T and TH-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 703-305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

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